

February 10, 2017 GWAC Update from the Recycled Water Committee, presented by the Chair, John Kmiec

The Recycled Water Committee was tasked with assessing the current status of the recommendations for reclaimed water that emerged from the BRP. The Committee was also asked to explore opportunities across Arizona for new reclaimed water projects for augmenting local water supplies.

The Committee is comprised of several GWAC Members, their appointed representatives, and technical experts requested by the Committee Chair. Current Committee Members are:

Brad Hill from City of Flagstaff, and Charles Mosley from City of Sedona, both appointed by GWAC Member Ron Doba of NAMWUA; Brian Payne representing GWAC Member Warren Tenney, of AMWUA; Chuck Graf, representing Misael Cabrera of ADEQ; Bruce Hallin and Philip Richards, representing Dave Roberts of SRP; Gerry Walker of ADWR; GWAC Member Bob Lotts of APS, Scott Miller appointed by Bob Lotts, of APS; Maggie Messerschmidt, representing GWAC Member Pat Graham, of the Nature Conservancy; Tim Thomure of Tucson Water, appointed by GWAC Member and Committee Chair, John Kmiec.

Although the Committee is run by appointed members, our process allows for public input and encourages feedback from members of the public.

First Meeting

The first meeting was held on Monday, December 5, 2016. The format of the meeting followed a series of five educational presentations given by the designers of recycled water projects around Arizona. The Chair, John Kmiec, provided an overview on the status of the BRP reclaimed water recommendations. Out of the 18 recommendations for reclaimed water made by the BRP: 50% have some degree of progress made toward completion; 39% have not been advanced; 11% have an unknown status. Chuck Graf of ADEQ, who served as staff for the BRP, will attend the next Recycled Water Committee meeting to offer further updates on the status of the BRP recommendations, contaminants of emerging concern and the opportunity for rule changes for direct potable reuse. Susan Craig of the Water Infrastructure Finance Authority (WIFA) provided examples of reclaimed water projects that have been funded through WIFA.

Presentations on large reclaimed water projects were also provided:

Presentations on Blue Ribbon Panel on Water Sustainability Report

Mr. Kmiec gave an overview on the status of the recommendations that came out of the Blue Ribbon Panel on Sustainability (BRP). Of the 18 recommendations for reclaimed water made by the BRP: 50% have some degree of progress made toward completion; 39% have not advanced; 11% have an unknown status. There were no questions concerning this presentation.

Current Statewide Reclaimed Water Projects

Susan Craig of WIFA presented on the background and capabilities of WIFA to fund reclaimed water projects for both small and large communities. She listed example projects which have recently taken place in the City of Buckeye, City of Prescott and City of Surprise. During the time for questions, Brian Payne of AMWUA asked if there is a difference in preference of awards funding for small versus large communities. Sara Konrad (WIFA Environmental Program Supervisor) answered that larger cities consider going out to the bond market, on their

own. Medium and smaller cities often go to WIFA, where securing a loan is less expensive for them. Mr. Kmiec asked if the loans can be for administrative aspects of a reclaimed water project. Ms. Craig Responded that the loans must have a water quality improvement component to them.

Presentations by Large Reclaimed Water Projects

Jeff Biggs, the Strategic Initiatives Administrator for Tucson Water presented on the history and future of Tucson's recycled water use. His presentation included discussion on an upcoming project to revive surface flows in the Santa Cruz River with excess reclaimed system water. Tucson Water has conducted annual surveys since 2012 to gauge public perception on using reclaimed water for direct potable reuse. The City has also recommended advanced water treatment concepts for a possible expanded opportunity to do indirect potable reuse.

Bob Lotts, Water Resources Director for APS provided a presentation on Palo Verde Nuclear Plant's use of reclaimed water. Mr. Lotts covered several topics, including the history and current status of water sourcing for Palo Verde. The plant uses reclaimed water for cooling. The presentation looked at the wastewater treatment plants in the Phoenix Metro Area that contribute reclaimed water to Palo Verde, via a 28.5 mile pipeline. When asked about future challenges with securing reclaimed water for purchasing, Mr. Lotts acknowledged the uncertainty of available future water sources. He is working on a plan moving forward for working towards securing long-term effluent deliveries from the cities to the plant, even under future supply uncertainties. Mr. Kmiec asked if there are groundwater backups for Palo Verde. Mr. Lotts said that they use a couple thousand acre-feet a year of groundwater that goes through reverse-osmosis for onsite potable water.

Brad Hill, Utilities Director at City of Flagstaff, presented on the importance of a robust reclaimed water system for the City. Twenty percent of Flagstaff's water deliveries come from direct delivered reclaimed water. The City has two A+ wastewater treatment plants that help to provide affordable reclaimed water to customers. The City will be holding rate increase meetings in 2017. The City is currently evaluating Indirect and Direct Potable Reuse options. Mr. Biggs asked about wastewater treatment costs, and which users should bare the financial burden of rate increases. Mr. Hill said this is still being discussed. The City recently purchased a water ranch to augment water supplies, this may also play into changing water rates. Charles Mosely from City of Sedona asked about contaminants of emerging concern as part of solid waste disposal protocol. Mr. Hill replied that the City is updating their policies on this matter. Mr. Lotts asked if future rising water rates will make reclaimed water facility operation unviable; will customers just look for a different source if the cost is too high? Mr. Hill replied that reclaimed water rate changes are very divisive and that some entities have stated that rate changes were not high enough. Rate changes aid in developing better system projects, like advanced treatment facilities. Ms. Craig stated that WIFA has a statewide reclaimed water rates survey (and survey results) available on their website.

The second meeting summary

The second meeting was held on January 24th, 2017.

Advisory Panel on Emerging Contaminants

Mr. Kmiec invited Chuck Graf, Principle Hydrogeologist at ADEQ, to present on the recent Advisory Panel on Emerging Contaminants (APEC). A PDF version of the presentations available on the Recycled Water Committee webpage. Mr. Graf outlined the efforts made by APEC to identify and research contaminants of

emerging concern (CECs) in reclaimed water. This work was led by ADEQ with additional assistance from the University of Arizona.

Steering Committee on Arizona Potable Reuse

Tim Thomure, Director of Tucson Water, presented on behalf of Water Reuse Arizona and the Steering Committee on Arizona Potable Reuse (SCAPR) – an outcome of Governor Brewer’s Blue Ribbon Panel recommendations. SCAPR makes efforts to educate local communities that the time for direct potable reuse (DPR) is here. Mr. Thomure addressed the regulatory frameworks used by California and Texas that have allowed for DPR pilot programs. The outcomes of the first phase of SCAPR were: 1) a statement that potable reuse is on the table in Arizona, 2) that indirect potable reuse projects are in place, and 3) a recommendation for a flexible regulatory framework. Phase one also listed primary concerns for the future of potable reuse. The next phase will be a draft report from SCAPR which will likely be available in late Spring 2017.